LISTING OF CLAIMS

1. (currently amended) A fuel cell separator having gas supply grooves on one side or both sides thereof which is molded from a composition composed mainly of an electrically conductive carbon powder being spherical or massive graphite having a mean particle diameter of 150 to 500 μm and a binding agent,

wherein the electrically conductive carbon powder is present such that its particles longer than 70 μm in the major axis direction and longer than 50 μm in the minor axis direction along the vertical cross section of the fuel cell separator occupy more than 50% of the sectional area in the vertical direction,

wherein said binding agent is present in an amount of from 10 to 50 parts by mass per 100 parts by mass of the electrically conductive carbon powder.

2. (Previously presented) A fuel cell separator having gas supply grooves on one side or both sides thereof which is molded from a composition composed mainly of an electrically conductive carbon powder and a binding agent, wherein said binding agent is contained in an amount of 10 to 50 parts by mass for 100 parts by mass of the electrically conductive carbon powder and the

electrically conductive carbon powder is spherical or massive graphite having a mean particle diameter of 150 to 500 μm.

3. (original) The fuel cell separator as defined in Claim 2, wherein the spherical or massive graphite has a bulk density higher than 0.6 g/ml.

4. (previously presented) The fuel cell separator of Claim 2 or 3, wherein the electrically conductive carbon powder is present such that its particles longer than 50 μm in the major axis direction and longer than 30 μm in the minor axis direction along the vertical cross section of the fuel cell separator occupy more than 50% of the sectional area in the vertical direction.

5. (previously presented) The fuel cell separator as defined in Claim 1, which has a resistivity not higher than 20 mΩ·cm measured according to JIS H0602.

6. (previously presented) A process for producing a fuel cell separator having gas supply grooves on one side or both sides thereof from a composition composed mainly of an electrically conductive carbon powder and a binding agent, wherein said process

comprises injection molding a mixture containing 10 to 50 parts by mass of a binding agent for 100 parts by mass of the electrically conductive carbon powder which is spherical or massive graphite having a mean particle diameter of 150 to 500 μm.

7. (previously presented) The process for producing a fuel cell separator as defined in Claim 6, wherein the spherical or massive graphite has a bulk density higher than 0.6 g/ml.

8. (previously presented) A polymer electrolyte fuel cell comprising a plurality of unit cells connected together, each unit cell consisting of a pair of electrodes embracing a polymer electrolyte membrane and a pair of separators embracing the electrodes, said separators having passages molded thereon through which gas is supplied and discharged, characterized in that all or part of the separators in the unit cells are those which are defined in Claim 1.

9. (previously presented) The fuel cell separator as defined in Claim 2, which has a resistivity not higher than 20 mΩ·cm measured according to JIS H0602.

10. (previously presented) A polymer electrolyte fuel cell comprising a plurality of unit cells connected together, each unit cell consisting of a pair of electrodes embracing a polymer electrolyte membrane and a pair of separators embracing the electrodes, said separators having passages molded thereon through which gas is supplied and discharged, characterized in that all or part of the separators in the unit cells are those which are defined in Claim 2.

11. (previously presented) The fuel cell separator as defined in Claim 1, wherein the spherical or massive graphite has a bulk density higher than 0.6 g/ml.

12. (previously presented) The fuel cell separator as defined in Claim 1, wherein the spherical or massive graphite has a bulk density of 0.6 to 1.2 g/ml.

13. (previously presented) The fuel cell separator as defined in Claim 2, wherein the spherical or massive graphite has a mean particle diameter of 150 to 450 μm.

14. (previously presented) The process for producing a fuel cell separator as defined in Claim 6, wherein the spherical or massive graphite has a mean particle diameter of 150 to 450 μm.

15. (previously presented) The fuel cell separator as defined in Claim 2, wherein the spherical or massive graphite has a bulk density of 0.6 to 1.2 g/ml.

16. (previously presented) The process for producing a fuel cell separator as defined in Claim 6, wherein the spherical or massive graphite has a bulk density of 0.6 to 1.2 g/ml.

17. (new) The fuel cell separator of claim 1 wherein the conductive carbon is massive graphite.

18. (new) The fuel cell separator of claim 2 wherein the conductive carbon is massive graphite.